

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 14A-1057EG

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS ELECTRIC AND NATURAL GAS DEMAND SIDE MANAGEMENT (DSM) PLAN FOR CALENDAR YEARS 2015 AND 2016 AND TO CHANGE ITS ELECTRIC AND GAS DSM COST ADJUSTMENT RATES EFFECTIVE JANUARY 1, 2015.

**RECOMMENDED DECISION OF
ADMINISTRATIVE LAW JUDGE
G. HARRIS ADAMS
APPROVING SETTLEMENT AGREEMENT
WITHOUT MODIFICATION, GRANTING
APPLICATION WITH MODIFICATIONS, AND
REQUIRING COMPLIANCE FILINGS**

Mailed Date: May 22, 2015

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I. STATEMENT

1. On October 30, 2014, Public Service Company of Colorado (Public Service or Company) filed its Application for Approval of its Electric and Natural Gas DSM Plan for Calendar Years 2015 and 2016 (2015/2016 DSM Plan) and to change its Electric and Gas DSM Cost Adjustment Rates Effective January 1, 2015 (Application).

2. Public Service requested, pursuant to Rules 4 *Code of Colorado Regulations* (CCR) 723-4-4750 through 4760 of the Commission's Rules Regulating Gas Utilities and Pipeline Operators (Gas Demand Side Management (DSM) Rules), a decision from the Commission approving the following: (1) Public Service's 2015/2016 Electric and Natural Gas Demand-Side Management Plan; (2) Public Service's proposed electric demand reduction goals for 2015/2016; (3) Public Service's proposed electric DSM budgets for calendar year 2015/2016; (4) Public Service's proposed gas DSM budgets for calendar years 2015/2016 and the associated energy savings proposed by the Company; (5) the avoided costs that Public Service used in the analysis of the electric and gas cost-effectiveness as reflected in Appendix E of the 2015/2016 Plan; (6) the technical assumptions, including the deemed savings for prescriptive programs set out in the Technical Reference Manual to the 2015/2016 DSM Plan; and, (7) the net-to-gross (NTG) factors for each DSM product that are set out in the Technical Reference Manual of the 2015/2016 DSM Plan.

3. Public Service requested an order approving the 2015/2016 DSM Plan and authorizing it to place into effect revised gas and electric tariff sheets modifying its gas Demand Side Management Cost Adjustment (DSMCA) and electric DSMCA rates effective on the later of January 1, 2015 or within a reasonable time following issuance of a final decision in this proceeding.

4. The Commission issued Notice of the Application on November 3, 2014, which provided 30 days or until December 3, 2014 for any interested party to seek leave to intervene in this proceeding.

5. By Decision No. C14-1476-I, issued December 15, 2014, the Commission deemed the Application complete and referred this matter to an administrative law judge (ALJ) for disposition.

6. In response to Public Service's Application, interventions were filed by several parties. By Decision No. R15-0024-I, issued January 9, 2015, the ALJ granted the interventions of Colorado Energy Consumers (CEC); the City of Boulder (Boulder); Energy Outreach Colorado (EOC); Climax Molybdenum Company (Climax); CF&I Steel, L.P., doing business as Evraz Rocky Mountain Steel (CF&I); the Southwest Energy Efficiency Project (SWEEP); the City and County of Denver (Denver); EnerNOC, Inc. (EnerNOC); the Energy Efficiency Business Coalition (EEBC); Western Resource Advocates (WRA); and the Cities of Aurora, Centennial, Commerce City, Englewood, Glendale, Golden, Greenwood Village, Lafayette, Lakewood, Littleton, Thornton and Westminster, and the Town of Superior (collectively the Municipalities). Staff of the Colorado Public Utilities Commission (Staff), the Colorado Office of Consumer Counsel (OCC), and the Colorado Energy Office (CEO) intervened as of right.

7. By Decision No. R15-0024-I, issued January 9, 2015, a procedural schedule was adopted that, among other things, scheduled an evidentiary hearing to be held on March 30 and 31, 2015.

8. On March 2, 2015, Public Service, Staff, CEO, Denver, EOC, and EnerNOC (the Settling Parties) filed a Joint Motion for Approval of Settlement Agreement (Joint Motion) and Stipulation and Settlement Agreement (Settlement Agreement) with the intent of resolving all issues raised with respect to approval of the Application. SWEEP, WRA, and the EEBC joined in the request that the Commission approve the Settlement Agreement other than that portion of Section 7 that relates to approval of the Company's proposed avoided energy and avoided

transmission and distribution costs. Specifically, SWEEP, WRA, and EEBC reserved their rights to contest at hearing the Company's proposed avoided energy and avoided transmission and distribution costs. CF&I/Climax, CEC, Boulder, and the Municipalities do not oppose approval of the Settlement Agreement as requested in the Joint Motion. The Settlement Agreement is attached hereto as Appendix A.

9. In the Settlement Agreement, certain changes are proposed to the 2015/2016 DSM Plan as originally filed with the Application, including modest changes to the gas and electric goals and budgets, and specific program changes as detailed in Paragraph 5 of the Settlement Agreement.

10. On March 6, 2015, the OCC filed a response to the Joint Motion.

11. On March 11, 2015, the OCC filed a partial joinder to the Settlement Agreement, stating:

By filing this Partial Joinder, it is the intention of the OCC to resolve, as between the OCC and the Settling Parties, as that term is defined in the Settlement Agreement ("Settling Parties"), the issues specifically identified herein in paragraphs 1-5 (except 5c), 6, and 9. Issues addressed by OCC's pre-filed testimony related to paragraphs 1-5, with the exception of those set forth in 5c, 7 and 8, are no longer in dispute. The OCC does not join the Settlement Agreement in total, and contests the matters as identified in paragraphs 5c, 7 and 8.¹

The subject of paragraph 5c addresses the Company's LED Street Light Program. Paragraph 7 addresses Updated Avoided Costs. Paragraph 8 addresses Technical Assumptions.

12. Aside from "specifics and limitations" expressed, the OCC "determined it is able to join the Settlement Agreement's recommendation that the Commission approve the

¹ OCC's Revised Partial Joinder at p. 1.

Company's 2015 and 2016 natural gas and electric DSM Plan, with the specific modifications to that plan, as more fully described in the Settlement Agreement.”²

13. By Decision No. R15-0239-I, issued March 12, 2015, the OCC was permitted to supplement its answer testimony. Public Service was also permitted to provide live rebuttal testimony to address the OCC's supplemental answer testimony.

14. By Decision No. R15-0281-I, issued March 26, 2015, Public Service's Motion to Strike Portions of the Answer Testimony of OCC Witness Chris Neil Addressing Avoided Capacity Costs and the Surplus Capacity Credit was granted in part. Public Service generally argued that the OCC should not be permitted to re-litigate the Company's use of the full avoided capacity cost of the Resource Acquisition Period Combustion Turbine (RAP CT) for DSM. The OCC was directed to file a new revision of Mr. Neil's Answer Testimony by March 30, 2015.

15. On March 16, 2015, Public Service filed a Motion for Waiver of One Portion of Paragraph 97 of Decision No. C14-0731, issued on July 1, 2014 (Motion for Waiver).³ Public Service requested the Commission “grant a waiver of that portion of Para. 97 of Decision No. C14-0731 that approved the use of Strategist to calculate avoided energy costs to allow the Company to use the Prosym model to calculate the avoided marginal energy cost for each hour of the year.”⁴

16. On March 30, 2015, the OCC filed a response to the Motion for Waiver.

17. At the scheduled time and place, the evidentiary hearing was convened. During the course of the hearing, oral testimony was received from Shawn M. White, William T. Conrad,

² OCC's Revised Partial Joinder at p. 2.

³ Decision No. C14-0731 in Proceeding No. 13A-0686EG issued July 1, 2014, is the Commission's decision in the Public Service DSM strategic issues proceeding (2013 Strategic Issues Decision).

⁴ Motion for Waiver at 4.

Chad S. Nickell, and Jeremy A. Petersen, on behalf of Public Service; Gwendolyn Farnsworth and Kenneth Wilson on behalf of WRA; Scott England and Christopher Neil on behalf of OCC; and Paul Caldera on behalf of Staff.

18. Hearing Exhibits 1 through 10, 451 through 453 (including 452C), 501 through 506, 508, 651, 701 through 706, 708 through 716 were identified, offered, and admitted into evidence.⁵ Hearing Exhibit 8 contains replacement pages for Hearing Exhibit 4 that supersede Hearing Exhibit 4 to the extent of overlap. Exhibits 1 through 6, 8, 451 through 453, 501 through 505, 651, 702, 706, and 708 were admitted as electronic records admitted by administrative notice. Hearing Exhibits 7, 9, 10, 506 through 506, 508, 701, 703 through 705, and 709 through 716 were admitted as presented in paper form during the course of the hearing.⁶ Hearing Exhibits 507 and 707 were presented in paper form during the course of the hearing and were not admitted.

19. Hearing Exhibit 452C (including the Confidential Attachment K LW-2C) was identified, offered, and admitted during the hearing in this matter and designated with a “C” (*i.e.*, 452C) as a confidential exhibit subject to protections afforded by the Commission’s Rules of Practice and Procedure.⁷

20. On April 17, 2015, Statements of Position were filed by Public Service, Staff, the OCC, EOC, EEBC, Climax, SWEEP, and WRA.

⁵ Hearing Exhibit 701 identifies hearing exhibit references in the evidentiary record to the title of pre-filed electronic records in the administrative record. Electronic records were admitted into evidence without objection. Rule 1501(b) of the Commission’s Rules of Practice and Procedure 4 CCR 723-1, is waived as to electronic hearing exhibits admitted by administrative notice.

⁶ Hearing Exhibit 708 was admitted without objection as a late-filed electronic exhibit.

⁷ Hearing Exhibit 712C was marked, but never identified or offered into evidence. It was returned to counsel for the OCC.

21. In reaching this Recommended Decision, the ALJ has considered all arguments presented by the parties, including those arguments not specifically addressed in this Recommended Decision. Likewise, the ALJ has considered all evidence admitted at the hearing, even if the evidence is not specifically addressed in this Recommended Decision.

22. Pursuant to § 40-6-109, C.R.S., the ALJ now transmits to the Commission the record and exhibits in this proceeding along with a written recommended decision.

II. MOTION FOR WAIVER

23. As a preliminary matter at hearing, the pending Motion for Waiver filed by Public Service was addressed. Without objection, response time to the motion was shortened to the time of hearing and oral responses were heard.

24. Public Service requests a permanent waiver of the applicability of that portion of Paragraph 97 of Decision No. C14-0731 in which the Commission approved the Company's use of the Strategist model to determine the avoided energy costs associated with its DSM Plans going forward.

25. Based upon grounds incorporated from pre-filed Rebuttal Testimony of Shawn M. White (page 11, line 19 through page 12, line 17) and Rebuttal Testimony of Jeremy A. Petersen, Public Service argues that good cause supports the requested waiver. Public Service contends that the more granular marginal energy data that is produced by Prosym enables the Company to make a more precise and accurate calculation of the avoided energy benefits of each individual measure included within the 2015/2016 DSM Plan and of the 2015 and 2016 DSM portfolios as a whole. Further, Public Service contends that no other party is adversely affected by the waiver sought because the resulting reduction of overall avoided energy benefit only reduces the costs of DSM to the Company's customers.

26. On March 30, 2015, the Office of Consumer Counsel's Response to Public Service Company of Colorado's Motion for Waiver of One Portion of Paragraph 97 of Decision No. C14-0731 issued on July 1, 2014 was filed. The OCC opposes the requested waiver. The OCC first points to Mr. Hill's testimony on behalf of Public Service in Proceeding No. 13A-0686EG, where the Company requested and advocated for approval of using the Strategist model.⁸ In sum, the OCC argues the Company failed to demonstrate any change in circumstance sufficient to justify a waiver of Decision No. C14-0731.

27. WRA and EEBC orally opposed the requested relief at hearing.

28. WRA cites Decision No. C15-0284, where the Commission rejected a similar request by Public Service. *See* Decision No. C15-0284, Proceeding No. 13A-0836E issued March 27, 2015. WRA then argues that the Motion for Waiver is procedurally improper under Rule 1003 of the Commission's Rules of Practice and Procedure, 4 CCR 723-1. The 2013 Strategic Issues Decision is now a final Commission decision. Therefore, a petition should have been filed to request the relief sought. Notably, a petition would ensure that notice is provided to all parties to the prior proceeding. It is argued that all are harmed by deprivation of due process rights to assess, evaluate, and contest the Company's deviation from the Commission's prior decision. To the merits of the motion, WRA opposes the Company's assumption that any decrease in its performance incentive must necessarily be good, arguing for the benefits of accuracy and an interest in maximizing DSM.

29. EEBC also argues that Public Service failed to show good cause for a grant of the requested waiver. The Commission approved use of the Strategist model following

⁸ Rebuttal Testimony of James F. Hill, December 20, 2013, Proceeding No. 13A-0686EG (Hill Rebuttal), 9, ll. 15-18; 18, ll. 8-15; and 8, ll. 20-9, 1. 7.

litigation of the issue in Proceeding No. 13A-0686EG. Further, this proceeding considers the 2015/2016 DSM Plan as a whole, rather than delving into individual products and measures. EEBC joins WRA's procedural objections and suggests that the next strategic issues proceeding is the more appropriate proceeding to address a new methodology to be used as a policy matter. EEBC also properly points out that, although Public Service receives some DSM benefit in the form of an incentive, the majority of benefits go to ratepayers. As a final matter, EEBC argues that the record supports approval of the Settlement Agreement and that a compliance filing might be required to determine avoided energy costs using the Strategist model.

30. Following oral responses, Public Service moved for leave to orally reply on the ground that non-duplicative points would be made and no opportunity had been provided for response. The OCC and WRA opposed leave to orally respond.

31. Rule 1400(e) provides:

A movant may not file a reply to a response unless the Commission orders otherwise. Any motion for leave to file a reply must demonstrate:

- (I) a material misrepresentation of a fact;
- (II) accident or surprise, which ordinary prudence could not have guarded against;
- (III) newly discovered facts or issues, material for the moving party which that party could not, with reasonable diligence, have discovered at the time the motion was filed; or
- (IV) an incorrect statement or error of law.

32. The Rules of Practice and Procedure generally do not permit a reply. It was found that Public Service failed to establish good cause and the motion for leave to reply was denied.

33. Turning to the Motion for Waiver, it was found that Public Service failed to establish good cause for waiving the Commission's prior decision. The Motion for Waiver was denied based upon substantive and procedural arguments presented in opposition.

34. The undersigned first agrees that the Motion for Waiver is procedurally improper.

In Decision No. C15-0284, the Commission stated:

Rule 1003(a) of the Commission's Rules of Practice and Procedure, 4 *Code of Colorado Regulations* 723-1, allows requests for waiver or variance from substantive requirements contained in Commission decisions,⁵ and states that the rule is intended to "ensure orderly and fair treatment of all persons."⁶ In existing proceedings, requests are made by motion; if a proceeding is no longer active, requests shall be by petition in a separate proceeding.⁷ Requests made by petition are subject to the Commission notice and intervention period established in Rule 1206(d); however, the petitioner may include a request to waive or shorten this requirement.⁸

Consistent with Commission rules, we reject the Motion as improperly filed in this proceeding. The decisions in this proceeding are final. Public Service's request may require consideration of facts, which were not raised for consideration through RRR or other filings in this proceeding, and are outside of the record currently before us. Especially because the specifics of Windsource premium calculations in future filings were not contested in this proceeding prior to the Commission decisions being final, we find that the petition process, which includes a notice and intervention period, will better ensure the fair treatment of potentially interested persons pursuant to the stated intent of Rule 1003.

Footnote 5: Rule 1003(a), of the Commission's Rules of Practice and Procedure, 4 *Code of Colorado Regulations* 723-1, states that "[t]he Commission may, for good cause shown, grant waivers or variances from tariffs, Commission rules, and substantive requirements contained in Commission decisions...."

Footnote 6: Rule 1003(a).

Footnote 7: Rule 1003(b).

Footnote 8: *Id.*

35. Decision No. C14-0997 in Proceeding No. 13A-0686EG was mailed on August 18, 2014, granting in part, and denying in part, Applications for Rehearing, Reargument, and Reconsideration. Decision No. C14-0731, regarding which waiver is sought, is final for purposes of § 40-6-115, C.R.S. Thus, Public Service's requested relief should have been sought, if it chose to do so, by filing an appropriate petition.

36. Attempts to re-litigate matters in this proceeding that were previously decided are concerning. WRA argues a uniform standard should be applied to those seeking to re-litigate

issues decided in the most recent DSM strategic issues proceeding, Proceeding No. 13A-0686EG. The Commission strives for administrative efficiency in proceedings. To the extent litigation of policy matters have been addressed between DSM Plans through strategic issues proceedings, presentation of DSM Plans can be streamlined and better informed. Requiring parties to re-litigate that issue again in this proceeding is improper and in conflict with § 40-6-112(2), C.R.S.⁹

37. The model for determining avoided costs in this DSM proceeding was actually litigated in Proceeding No. 13A-0686EG. The latest this issue was brought to light in this proceeding, as argued by the OCC, was in connection with discovery regarding modeling propounded by EOC to Public Service on January 9, 2015. Public Service did not demonstrate the identity of parties between this proceeding and the earlier one. Public Service's argument for a different outcome of the prior litigation failed to establish good cause for waiver of the Commission's final decision on the litigated matter.

III. MOTION TO POSTPONE HEARING

38. The OCC next moved to postpone the hearing, "reopen the record," allow the Company to "supplement the record" with appropriate Strategist analyses, provide an opportunity for discovery on that issue, and then reschedule the hearing. Without supplementation, the OCC contends there is no sufficient basis for the Commission to render a decision on the Application.

39. In response, Public Service argues that compliance filings are customary in DSM proceedings to incorporate changes to the DSM Plan as a result of the Commission's decision. It

⁹ See Response of Western Resource Advocates to Public Service Motion to Strike Portions of the Answer Testimony of OCC Witness Chris Neil, p. 2.

is argued that postponement is not necessary because a compliance filing can be made to incorporate Strategist analyses. Public Service also argues that the Commission previously deemed the Application complete. Finally, it is noted that parties received notice of the issue through the course of discovery.

40. The OCC's motion is in the nature of a motion to dismiss. The basic argument is that Public Service will not be able to prevail after hearing. The OCC failed to show that Public Service could not prevail on the Application when the facts are viewed in a light most favorable to Public Service. Public Service desired to proceed with the hearing. Based thereupon, the motion to postpone the hearing was denied. The Application is Public Service's to prosecute. In denying the OCC's motion, it was explicitly noted that no ruling was made as to whether or not Public Service would be able to make a *prima facie* case.

IV. FINDINGS, DISCUSSION, AND CONCLUSIONS

A. Public Service DSM Plans

41. Pursuant to Rule 4752 of the Rules Regulating Gas Utilities and Pipeline Operators, 4 CCR 723-4, following approval of an initial DSM Plan, all utilities offering natural gas service shall file DSM Plans covering three years.

42. In Proceeding No. 07A-420E, Public Service proposed filing a combined gas and electric DSM Plan and proposed filing DSM Plans biennially through 2020. The Commission granted Public Service's request to file biennial combined DSM Plans and Public Service filed its combined natural gas and electric 2015/2016 DSM Plan consistent with that authority.

43. On April 26, 2011, the Commission issued Decision No. C11-0442 in Proceeding No. 10A-554EG, the second DSM strategic issues proceeding, establishing filing requirements

for all future DSM Plans, and adopting a number of policies and practices to be followed by the Company in implementing future DSM Plans.¹⁰

44. By Decision No. C13-1493-I, issued December 3, 2013, Proceeding No. 13A-0686EG, the Commission extended the Company's deadline for filing its 2015/2016 DSM Plan to October 30, 2014 and authorized continuation of the 2014 DSM Plan until such time that the 2015/2016 DSM Plan becomes effective pursuant to the Commission's final approval of that plan.

45. The Commission subsequently issued Decision No. C14-0731, dated July 1, 2014, in Proceeding No. 13A-0686EG, establishing new electric energy savings and demand reduction goals for the period 2015 through 2020. The Commission then issued Decision No. C14-0997 on August 18, 2014 granting in part and denying in part Applications for Rehearing, Reargument, or Reconsideration.

B. Public Service's 2015/2016 DSM Plan

46. As required by Commission Decision Nos. C13-1493-I, C14-0731, and C14-0997, and Rules 4750 through 4760 of the Commission's Rules Regulating Gas Utilities and Pipeline Operators, 4 CCR 723-4, Public Service filed its 2015/2016 Biennial Electric and Natural Gas Demand Side Management Plan.¹¹ Consistent with its 2014 DSM Plan, Public Service proposed a full portfolio of electric and natural gas DSM programs for Business, Residential, Government, and Low-Income customers. Public Service also proposed indirect programs focused on Customer Education, Market Transformation, and Planning and Market

¹⁰Decision No. C11-0442 at ¶¶ 64, 65, 87 and 88.

¹¹ Public Service's 2015/2016 DSM Plan is filed as Attachment No. WTC-1 to the Direct Testimony and attachments of William T. Conrad.

Research as well as plans for overall program administration and evaluation, measurement, and verification.

47. The Plan is designed to achieve energy savings of 407.3 GWh in electric energy savings and 79.7 MW of demand reduction in 2015 and 408.6 GWh in electric energy savings and 76.2 MW in demand reduction in 2016. The Gas DSM portfolio is designed to save 595,960 dekatherms in 2015 and 628,895 dekatherms in 2016. The energy savings goals exceed the targets of 400 GWh for electric energy savings and 65 MW of demand reduction related to energy efficiency programs established in the most recent DSM strategic issues proceeding, Proceeding No. 13A-0686EG.

48. The electric and gas DSM energy efficiency budgets are \$81.6 million in 2015 and \$78.7 million in 2016. These budgets are within the \$84.3 million annual spending cap established in the 2013 Strategic Issues Decision. The proposed budgets for gas DSM are \$13.1 million in 2015, and \$13.6 million in 2016, and are in compliance with the minimum spending requirement set forth in Rule 4753(h)(I). The gas budgets proposed for 2015 and 2016 also exceed the \$12 million minimum spending requirement established by the Commission for 2015 and 2016.¹² Public Service will recover the credits it will pay to customers under the Interruptible Service Option Credit (ISOC) program through the DSMCA, and all costs to EnerNOC for the Third Party Demand Response Program. In this Application, Public Service seeks approval of its proposed budgets for Saver's Switch and the proposed Demand Response Pilots of \$13.7 million and \$13.5 million respectively for 2015 and 2016.

¹² See Decision No. C14, 0731, Proceeding No. 13A-0686EG, ¶69.

49. Public Service designed its Demand Response Program to achieve total controllable load in the amount of 503 MW in 2015 and 516 MW in 2016.¹³ These amounts are short of the goals of 528 and 537 MW in 2015 and 2016 established in Proceeding No. 13A-0686EG, leaving variances of 25 MW and 21 MW, respectively. Combined with the energy efficiency demand reduction targets, the combined demand response targets are 583 MW in 2015 and 592 MW in 2016, short of the goals of 593 MW and 602 MW, respectively, with variances of 10 MW in each year.

50. Public Service explains that the shortfall in its Demand Response Program is the result of reduced growth in the ISOC program, existing customers leaving the ISOC program or reducing their interruptible load, and the effect of regulatory impacts on third-party demand response programs. Public Service states that it intends to address this shortfall through the introduction of three demand response pilots in the 2015/2016 DSM Plan in an attempt to eliminate the future demand reduction shortfall. The pilots are the Smart Thermostat pilot for residential customers, the Small Business Smart Thermostat pilot, and the Building Optimization Demand Response pilot.

51. In addition to the budgets and programs included in the 2015/2016 DSM Plan, Public Service seeks approval of the updated avoided costs and technical assumptions, including deemed savings and NTG ratios used for purposes of developing the Plan. The technical assumptions used to develop the plan are set forth in the Technical Reference Manual which is appended to the 2015/2016 DSM Plan as Appendix G. The NTG ratios relied on are set forth in Appendix G of the Technical Reference Manual.

¹³ See Supplemental Direct Testimony of Peter Narog.

52. Public Service also seeks authority to exercise flexibility in how it implements the 2015/2016 DSM Plan, consistent with the parameters agreed to in the Stipulation and Settlement Agreement approved by the Commission in Decision No. R08-1243 in Proceeding No. 08A-366EG on November 28, 2008, and reaffirmed in Decision No. R10-1336 in Proceeding No. 10A-471EG on December 16, 2010; Decision No. C11-0442 in Proceeding No. 10A-554EG on April 26, 2011; Decision No. R11-1326 in Proceeding No. 11A-631EG on December 9, 2011; and Decision No. R14-0389 in Proceeding No. 13A-0773EG on April 11, 2014.

53. Finally, Public Service seeks authority to count the energy savings from its proposed LED Street Lights product towards achievement of its 400 GWh annual energy savings goal while excluding the net benefits realized from such installations from the calculations of the performance incentive.

C. Motion to Dismiss

54. When Public Service rested its direct case, the OCC moved to dismiss the Application. During hearing, the motion was taken under advisement and the hearing continued. Each party was permitted to provide further argument as part of their Statement of Position (SOP).

55. The OCC argues that's there is no evidence in the record to show in detail how the avoided energy costs will be applied to individual measures. The OCC then argued that there was no reliable information to determine avoided energy cost or that the proposed DSM Plans are cost-effective. Even if the ALJ considers Mr. Peterson's rebuttal testimony and his cross-examination and redirect examination, there still remains no evidence of cost effectiveness using the Strategist model in the record. In its SOP, OCC renews its request that the record be

reopened and that further proceedings be had regarding the issue of avoided energy costs. In the alternative, OCC asks that the Application be dismissed.

56. Other parties addressed the impact of the ALJ's denial of the Company's Motion for Waiver, including Public Service, WRA, EEBC, SWEEP, CF&I/Climax and EOC. All disagree that there is insufficient evidence that the Company's DSM Plan is cost-effective and recommend that the Commission direct Public Service to recalculate the avoided energy costs using the Strategist model in the manner described by Mr. Hill in Proceeding No. 13A-0686EG and file the revised avoided energy cost as part of a compliance filing. These parties point to unrefuted evidence in the record indicating that the use of Strategist will produce results that will increase the overall cost-effectiveness of the DSM Plan, and will have no impact on or change the mix of electric DSM products or measures included in the Plan, as modified by the Settlement Agreement, or impact the budgets agreed to in the Settlement Agreement. Since the evidence shows that the use of the Strategist model will improve the cost-effectiveness of the 2015/2016 DSM Plan, these parties argue that the cost-effectiveness of the DSM Plan has been established by a preponderance of the evidence.

57. The ALJ finds that the OCC is estopped from seeking dismissal of the Application by virtue of its partial joinder in the Settlement Agreement recommending approval of the 2015/2016 DSM Plan. The OCC's reservation of rights to contest the Company's avoided energy costs does not afford it the right to request the 2015/2016 DSM Plan not be approved as provided by the Settlement and Revised Joinder, notwithstanding its objections to certain aspects of the Company's avoided costs and technical assumptions. The OCC advocated that the Company's avoided energy costs as determined by Prosym should be rejected. But, it still joined in requesting approval of portions of the plan while arguing there would be no Strategist evidence

of the exact level of avoided energy costs of each program and therefore an exact cost-effectiveness calculation. Under these circumstances, the OCC cannot seek dismissal of the entire Application. This motion to dismiss the Application will be denied.

D. Settlement Agreement

58. The Settling Parties stipulate that Public Service's 2015/2016 DSM Plan is consistent with §§ 40-3.2-103 and 40-3.2-104, C.R.S., and the Commission's Gas DSM Rules, 4 CCR 723-4-4750 through 4760, except to the extent such rules were waived in accordance with Decision No. C11-0645 issued in Proceeding No. 10A-554EG on June 14, 2011. In implementing the 2015/2016 DSM Plan, Public Service agreed in the Settlement Agreement to launch or continue in effect all programs and pilots described in the Plan, with certain modifications. Public Service agreed to use its best efforts to achieve at least 407.1 GWh in electric energy savings in 2015 and 407.5 GWh in 2016; and at least 79.6 MW in incremental demand reduction in 2015 and 76.2 MW in 2016. Public Service also agreed to strive to obtain controllable load of at least 503 MW from its Demand Response Program in 2015 and 592 MW in 2016. The parties recognized that, because of factors cited in direct testimony, Public Service may not be able to achieve the demand response goals of 593 MW in 2015 and 602 MW in 2016 as established in Decision No. C14-0731 in Proceeding No. 13A-0686EG. The parties further agreed that Public Service will use its best efforts to achieve natural gas savings of at least 573,602 dekatherms in 2015, and 619,306 dekatherms in 2016. The budgets for both energy efficiency and natural gas programs remained as originally proposed.

59. Certain modifications were recommended to specific programs and pilots that were included in the 2015/2016 DSM Plan.¹⁴ Public Service agreed to use its best efforts not to

¹⁴ See ¶5 of the Settlement Agreement, pp. 8-15.

make changes or additions to the Plan that would cause it to exceed the \$84.3 million budget cap applicable to its electric energy efficiency programs.

60. With the exception of WRA, SWEEP and EEBC, the Settling Parties agreed that the Commission should approve, or did not oppose the approval of, Public Service's updated proposed avoided costs as contained in Appendix E to the 2015/2016 DSM Plan. EOC did not oppose the approval of the updated avoided costs. WRA, SWEEP, and EEBC reserved the right to contest the proposed avoided energy and avoided transmission and distribution costs at hearing.

61. The Settling Parties also requested approval of the technical assumptions set forth in the Technical Reference Manual appended to the 2015/2016 DSM Plan as Appendix G, including the deemed savings and NTG ratios. For purposes of calculating gross savings derived from the programs, Public Service agreed to use the technical assumptions for measures installed during calendar years 2015 and 2016. With respect to the Home Lighting & Recycling and Lighting Efficiency products, the deemed savings values, NTG ratios, and other technical assumptions will be adjusted for 2016 based on the results of the comprehensive program evaluation that will be carried out in 2015.

62. The Settling Parties recommend that the changes in the electric and gas DSMCA rates be implemented on not less than one day's notice following the issuance of a final decision in this proceeding approving the Settlement Agreement. The rates were requested to be pro-rated to reflect the portion of the 2015 calendar year during which the 2015 Plan will be in effect.

63. The Settling Parties "state that reaching Stipulation in this docket by means of a negotiated settlement is in the public interest and that the results of the compromises and

settlements reflected by the Stipulation are just, reasonable and in the public interest.” Settlement Agreement p. 20.

64. The Settlement Agreement is comprehensive in nature and resolves all necessary matters for purposes of this proceeding as between the Settling Parties and those that do not oppose its approval.

E. Contested Issues

1. Avoided Cost Model

a. Argument

65. In its Answer testimony, OCC witness Mr. Chris Neil addresses the model used to calculate avoided costs. Public Service provided one set of avoided energy costs based on the Strategist model in the DSM Plan filing. In response to discovery, Public Service provided substantially different avoided energy costs based on the Prosym model. Mr. Neil states that if the Commission deviates from use of the Strategist model to calculate avoided costs, the OCC suggests using a model such as PLEXOS or Prosym that allow for better estimates of the costs. The OCC recommends the PLEXOS model if it demonstrates better results; and if not, Prosym should be used. Mr. Neil believes that the Strategist model is not as detailed in its calculation of costs as the other two models. For example, Prosym calculates hourly marginal energy costs for the entire year. The PLEXOS model also provides greater detail, and Public Service represents that PLEXOS does the best job of modeling intermittent resources. Mr. Neil concludes that PLEXOS appears to be the best model overall.

66. During cross-answer testimony, WRA witness Ms. Gwendolyn Farnsworth also testified that Public Service altered the methodology used to calculate avoided energy costs by not using the Strategist model to calculate the avoided costs as approved in the strategic issues

proceeding. She recommends that the Strategist model be used, or, if the Commission permits modification, calculate the costs as the average difference in system costs or marginal system cost without DSM. Ms. Farnsworth does not agree with the OCC that Public Service should use the new PLEXOS software model. If the software is altered, however, she recommends that Public Service calculate the marginal system cost without DSM. If the Company is not required to alter its avoided cost methodologies, the next opportunity to examine the methodologies will be in the 2015 Electric Resource Plan (ERP) proceeding to be filed in October of 2015.

67. In rebuttal, Mr. Peterson focuses on Public Service's use of the Prosym model, rather than Strategist model, to determine the value of avoided energy. Mr. Peterson states that Prosym is the model Public Service has used historically to determine the avoided energy benefits of individual DSM products when the basis of the calculation has been determined to be the marginal energy cost. Mr. Peterson states that both Prosym and Strategist simulate the economic dispatch of Public Service's generation fleet using similar assumptions regarding must run plants, must take resources, minimum and maximum generator output capability, unit heat rates, and unit fuel prices. However, Prosym contains hourly detail for all 8,760 hours of the year whereas Strategist contains such detail for only a representative week of each month of the year. He also argues that when assessing the avoided energy benefits of individual DSM programs, as Public Service does when it designs its DSM Plans, the more detailed hourly marginal energy cost data produced by Prosym enables Public Service to develop precise estimates of the avoided energy benefits associated with each individual product included in the Plan. Because Prosym generates a marginal energy cost for all 8,760 hours of the year, it allows determination of the avoided energy benefit of each individual measure by multiplying the energy savings achieved in

each hour of the year by the hourly marginal energy cost given the measure's particular load shape. Strategist will tend to overstate the avoided energy benefit of individual measures.

b. Findings

68. The issue of avoided energy and capacity costs and their calculation in this proceeding raises a question with respect to whether policy matters, such as the calculation methodology of avoided costs being dealt with in this proceeding, are DSM Plan issues or are properly addressed in DSM strategic issues proceedings.

69. The content of DSM Plan filings has been articulated in two DSM strategic issues decisions, the first being Decision No. C08-0560 in Proceeding No. 07A-420E, issued June 5, 2008. The Commission defined Plan proceedings as follows:

We find that the contents of the DSM plan shall include, at a minimum, the following:

- The proposed technical assumptions underlying the DSM plan
- The proposed avoided cost values underlying the DSM plan
- Specific non-energy benefit values being used for specific DSM programs, if applicable (vs. the default values)
- The portfolio of specific programs being proposed, including the customer segment(s) being targeted and anticipated participation rates
- TRC calculations for each program and for the overall portfolio
- Budgets for each program, indirect impact programs, administration and the total portfolio
- Descriptions of the proposed indirect impact programs (market transformation, education, pilot and start-up programs)
- The spectrum of potential low-income programs, as addressed in this Decision
- Other topics to be addressed in testimony, as set forth in this Decision.¹⁵

¹⁵ Decision No. C08-0560, Proceeding No. 07A-420E, ¶171.

70. In the second Strategic issues proceeding, Decision No. C11-0442 in Proceeding No. 10A-554EG, the Commission again clarified what a DSM Plan filing includes:

Consistent with existing practice, Public Service shall set forth in this plan the various programs the Company will implement each year with an associated annual budget. Specifically, the plan shall describe how each DSM program or activity is expected to operate, which customers are eligible to participate, how customers receive the services, who provides those services, and how the program will be evaluated and monitored. The plan shall also establish a budget for each program and shall demonstrate how that program is cost effective either on a stand-alone basis (for most direct impact programs) or on an entire-portfolio basis (for many indirect impact programs). The Company's DSM plan shall also set forth the technical assumptions that support both the analysis of program cost effectiveness and the calculations of achieved savings and projected net economic benefits. The plan shall further describe ongoing measurement and verification protocols for the DSM programs as well as parameters for comprehensive evaluations for select programs.¹⁶

71. Strategic issues proceedings, in contrast, have historically addressed policy and guiding principles, including such matters as energy efficiency and demand response goals, the disincentive offset and levels of achievement for the performance incentive, established best practices, instituted reporting requirements when necessary, set future filing time frames, and addressed policy matters that generally transcend periodic plans. Strategic issues filings have also included major program or plan initiatives not typically presented in plan proceedings, and other matters that generally affect the overall DSM program. Strategic issues permit resolution of litigated disputes affecting timely consideration of DSM Plans.

72. Avoided costs must always be included in DSM Plan filings to calculate net economic benefits of DSM programs. *See* Decision No. C08-0560 in Proceeding No. 07A-420E. Avoided costs were associated with goal determination:

25. Given that savings goals established in later years are general in nature and the most subject to change with additional experience, the Commission

¹⁶ Decision No. C11-0442, Proceeding No. 10A-554EG, ¶64.

should revisit such savings goals in future proceedings to account for variability in market potential, new technologies, avoided costs, and other factors.

Decision No. C11-0442, Proceeding No. 10A-554EG.

73. In the most recent strategic issues proceeding, the Commission made certain policy findings regarding determination of avoided costs for the plan under consideration:

96. We adopt Public Service's approach for determining avoided generation capacity costs, with the exception of the proposed adjustment for ancillary services. Public Service's derivation of the cost to develop the "Resource Acquisition Period (RAP) CT" is reasonable and representative of the generation capacity costs avoided by DSM when the Company's system has excess generation capacity. We also agree with Public Service that the Company's recent ERP competitive solicitation resulted in exceptionally low bids for CT capacity. Therefore, we will not adopt the avoided generation capacity costs recommended by the OCC.

97. We agree with WRA that the proposed ancillary services adjustment to the RAP CT value was not developed sufficiently for adoption in this proceeding. We also decline to adopt any value for avoided transmission and distribution costs associated with DSM programs in this proceeding, due to the lack of support in the record. However, we direct Public Service to study the avoided transmission and distribution capacity costs and propose values in its DSM Biennial Plan for 2015 through 2016. Finally, we approve the use of the Strategist model for determining avoided energy costs for electric DSM.

Decision No. C14-0731, Proceeding No. 13A-0686EG.

74. DSM Plan filings have not historically addressed policy matters, such as the determination or calculation of avoided costs. In Proceeding No. 13A-0773EG, the settling parties agreed that the Commission should approve Public Service's proposed avoided costs in the appendix to the 2014 DSM Plan, Decision No. R14-0389, at ¶80. Notably, a footnote to the decision approving the settlement read as follows:

¹⁴ Staff, CEC, and Boulder do not oppose the approval of the avoided costs for the limited purpose of calculating cost-effectiveness and net economic benefits related to the 2014 DSM Plan. While the OCC believes that avoided costs should be addressed in this proceeding, it nonetheless recognizes that avoided costs will be addressed in the strategic issues proceeding.

75. Also in Decision No. R14-0389, the updated avoided costs as depicted in the 2014 DSM Plan and the technical assumptions set out in the Technical Reference Manual appended to the 2014 DSM were approved in their entirety without modification in accordance with the Settlement Agreement. The ALJ acknowledged that though it was appropriate to address the approval of the avoided costs in the Plan proceeding, “the *methodology* for determining avoided costs was determined in a previous Strategic Issues proceeding[.]” (emphasis added)¹⁷

2. Avoided Costs

a. Argument

76. Public Service proposed updated avoided costs in its 2015/2016 DSM Plan, as required by Decision No. C11-0442, Proceeding No. 10A-0554EG. Appendix E contains details regarding the Company’s avoided cost assumptions. Mr. Conrad states that Public Service has updated its avoided costs and technical assumptions to reflect more current data and the results of comprehensive product evaluations conducted during 2014. The Company’s avoided capacity costs reflect current generic capacity cost estimates used in Phase II of the Company’s 2011 ERP for a RAP CT.¹⁸

77. In Answer Testimony on behalf of the OCC, Mr. Neil suggests that the Company’s use of the costs of a RAP CT from the 2011 ERP, escalated for the 2015/2016 timeframe may be inconsistent with the methodology approved by the Commission in the 2013 Strategic Issues Decision. In support of this argument, Mr. Neil asserts that the “decision is silent on how the

¹⁷ Decision No. R14-0389, Proceeding No. 13A-0773EG, p.55 ¶179.

¹⁸ Proceeding No. 11A-869E

avoided capacity costs are to be developed.”¹⁹ OCC argues that Decision No. C14-0731 was unclear regarding whether the Commission intended to require the Company to do more to update its avoided capacity costs than simply escalate the costs of the RAP CT for each subsequent DSM Plan filing. OCC also argues that Public Service improperly failed to incorporate a 45 percent reduction in the cost of a combustion turbine (CT) in the avoided capacity costs proposed for this proceeding. The OCC also seeks a determination that the avoided capacity costs included in the Company’s DSM Plan should be discounted in years when the Company has excess capacity. In addition, OCC states that the inconsistent use of the Surplus Capacity Credit needs to be resolved and that the 2013 Strategic Issues Decision is silent on how the avoided capacity costs are to be developed. The OCC states that while there is no question Public Service is to develop the cost of a utility-built CT, the decision is unclear as to whether Public Service was required to develop these costs every four years as part of the ERP, or whether these costs were to be updated whenever a DSM Plan is filed. In addition, OCC points out that there is confusion around the avoided capacity costs to be used in the early years, before Public Service needs firm capacity. The OCC believes that there is only one avoided cost and that it should be consistently applied.

78. In Rebuttal Testimony, Public Service witness Mr. White discusses the OCC’s criticisms of the surplus capacity credit. Public Service states that the OCC’s argument is the same argument that the Commission rejected in Decision No. C14-0731, in the 2013 DSM strategic issues proceeding. The OCC uses the Commission’s recent decision in Proceeding No. 13AL-0958E, approving the use of a surplus capacity credit in valuing the generation capacity provided by Qualifying Facilities (QFs), as the basis for revisiting the issue of avoided

¹⁹ Chris Neil Answer Testimony, p. 11 ln. 1.

capacity costs for DSM. The Company refers to Debra Sundin's Rebuttal Testimony filed in the 2013 strategic issues proceeding, where she explained why Public Service was recommending use of the full avoided capacity costs of the RAP CT in the DSM context despite its advocacy in other contexts that discounted values should be used. Public Service argues that the Commission's ruling in Decision No. C14-0731 rejected the avoided capacity costs recommended by the OCC and approved Public Service's use of the full avoided capacity cost of the RAP CT for DSM even in years when Public Service has excess capacity. The Company believes that the OCC fails to acknowledge that the Commission approved of the use of the full avoided capacity cost of the RAP CT for DSM only after full consideration of precisely the same claims that the OCC has made in this case. Public Service further argues that the Commission was aware that its DSM ruling on avoided capacity costs represented an exception to Public Service's use of discounted avoided capacity costs in other contexts. Accordingly, the Commission's more recent ruling in the QF facilities proceeding is not a sufficient basis for reopening the issue of avoided capacity costs in this proceeding.

b. Findings

79. The Commission specifically approved Public Service's use of the cost of RAP CT from the 2011 ERP, with the exception of the proposed adjustment for ancillary services, as the basis for the Company's avoided generation capacity cost calculation in Decision No. C14-0731. The Commission also specifically approved use of the Strategist model for determining avoided energy costs for electric DSM. The Company sought and the Commission approved specific authorization to use the full cost of the RAP CT as the basis for avoided capacity costs for purposes of this DSM Plan and any future DSM Plans filed until the Commission next revisits the question of avoided costs.

3. Home/Business Lighting Efficiency Program

a. Argument

80. Public Service proposed that deemed savings values, NTG ratios, and other technical assumptions for the Home Lighting & Recycling and Lighting Efficiency products be adjusted for 2016 based on the results of the comprehensive program evaluation that will be carried out in 2015. According to Mr. Conrad's direct testimony, the Company will initiate third-party evaluation of the business Lighting Efficiency product and the residential Home Lighting & Recycling product in 2015. These evaluations were selected and agreed to as part of the 2012-2013 DSM Biennial Plan Stipulation and Settlement Agreement.

81. OCC witness Dr. England believes the Commission should acknowledge that lighting efficiency standards will become more stringent in 2020 as detailed in the 2007 Energy Independence and Security Act (EISA), and should require Public Service to update the lower benefits that will be achieved through the home lighting and business lighting and efficiency programs and that the impact on the benefits should also be reflected in the NTG ratio. Dr. England also states that Public Service has not incorporated a change in the baseline lighting efficiency in 2020, which OCC believes leads to an overstatement of derived benefits used for the calculation of the benefit-cost ratio (MTRC) for the lighting programs. Dr. England argues that the Commission should require Public Service to recalculate the cost effectiveness of the home lighting and business lighting and efficiency programs and show how this lower cost effectiveness will affect participation rates. In addition, OCC suggests that when Public Service files its comprehensive lighting evaluation in 2015, new NTG factors should be used that are more in line from what can be estimated from use of national data. The OCC recommends that the Commission adjust the NTG upon the completion of the evaluation, and the updated values

should be used for the 2015 and 2016 DSM programs. If participation rates in the home lighting program fall significantly, the Commission should determine if all classes of customers still have an opportunity to participate. Dr. England states that any evaluation of the home lighting program will need to include an assessment of likely participation rates for the lighting program as well as the overall residential DSM program, since legislation requires that all classes be given an opportunity to participate. In addition, the Commission should modify the assumed life expectancies of CFL and LED light bulbs. Dr. England argues that many customers are unlikely to use the light bulbs as recommended. He states that those customers that are not following the U.S. Department of Energy's guidelines will not be able to maximize their usage of CFLs and therefore the bulbs will likely not reach current life expectancy. OCC recommends that the Commission should modify the assumed 100 percent installation rate of CFL and LED light bulbs, because with a 100 percent installation rate, it is assumed all bulbs purchased in a multiple light bulb pack are installed regardless of a customer's need to replace only one or a couple bulbs. The OCC argues this can lead to an overestimate of actual energy savings.

82. In Rebuttal, Mr. Conrad discusses OCC witness Dr. England's recommendations that the Commission should use updated technical assumptions from the completion of the 2015 comprehensive lighting evaluation for the 2015/2016 DSM Plan. Public Service states that the use of the 2015 values will allow a more accurate determination of savings, benefits, participation rates, and the cost-benefit ratio. According to Public Service, updating the assumptions will also allow parties to know if the Company has properly earned an incentive. Mr. Conrad also responds to Dr. England's six recommendations for changing the technical assumptions applicable to Public Service's Home Lighting and Recycling product. Mr. Conrad argues that while the passage of EISA could lead one to believe that the CFL will become the

new baseline bulb in 2020, past experience with standards implementation indicates that there is no such certainty. He states that it is impossible to predict the specific technology, and the associated cost, that will be in the marketplace in 2020 that will comply with the standard and become the new baseline bulb. He also argues that Dr. England's recommendation that the energy savings attributable to efficient lighting installed today should be reduced to reflect what is expected to be the baseline in 2020 is inconsistent with the practices Public Service has followed and which the Commission has approved since 2009. Public Service has always determined the savings achieved over the entire expected lifetime of the measure in relation to the baseline in effect during the year in which the measure is installed. Public Service also believes that the lighting market has matured and that the 2015 Home Lighting and Recycling Program Evaluation will give an indication of how much it has advanced. The evaluation will include an analysis of any potential market transformation resulting in a recommendation regarding an appropriate NTG factor going forward. In addition, he argues that retroactive application of the evaluation results, described by OCC, would represent a substantial change in policy from what has been in effect since 2009. It would be impossible for Public Service to adjust its implementation of its DSM Plan after-the-fact to accommodate reductions in deemed savings attributable to changes in technical assumptions applied retroactively. Public Service concludes that it has always been permitted by the Commission to operate its DSM Plans with the assurance that the same technical assumptions established at the beginning of a Plan year would be used at the conclusion of the year to calculate the energy savings achieved as a result of measures actually implemented during the year.

83. In supplemental Answer Testimony, OCC witness Dr. England argues that the lighting study will update and lead to potential reductions to NTG, installation rates, and light

bulb life expectancy based on actual customer usage. OCC believes that updating these key assumptions will impact the actual savings and benefits stemming from the lighting programs, and as such, the cost-benefit ratio. Additionally, the update to the NTG will significantly impact participation rates in the lighting programs and the residential DSM program at large as lighting represents the single most important residential DSM offering. The OCC argues that any update of the 2015 DSM Plan for the updated technical assumptions to generate the more current estimated energy savings, if any, from a 2015 comprehensive lighting study would not be in the public interest. The technical assumptions from the 2015 study should be used to evaluate both the 2015 and 2016 DSM Plans to ensure that Public Service has met its energy savings goals and is eligible for its incentive payment.

b. Findings

84. In his Rebuttal Testimony, Public Service Witness Mr. Conrad argues that OCC's recommendation to have the results of the 2015 study applied retroactively to 2015 is contrary to the policies and practices approved by the Commission that have governed the Company's DSM Plans since inception of the enhanced DSM program in 2009. The results from comprehensive evaluations have always been applied on a prospective rather than retroactive basis. Public Service argues correctly that the Commission issued this policy in the context of the 2010 DSM strategic issues proceeding in issuing the following specific directive in paragraph 87 in Decision No. C11-0442:

Consistent with current practices, Public Service shall implement, on a prospective basis, changes to technical assumptions, net-to-gross ratios, or program processes that result from a comprehensive program evaluation, where such evaluation is identified in an approved DSM plan. Non-confidential portions

of all program evaluations shall also be filed with the Commission and made available to participants in the DSM Roundtable.

Mr. Conrad also explains in his rebuttal why it would be difficult for Public Service to adjust its implementation of its DSM Plan after-the-fact to accommodate reductions in deemed savings attributable to changes in technical assumptions applied retroactively. If technical assumptions were essentially unknown until the year end, it would leave the Company unable to have a fair chance to achieve the goal or earn an incentive. For that reason, Public Service operates its DSM Plans with the assurance that the same technical assumptions established at the beginning of a plan year would be used at the conclusion of the year to calculate the energy savings achieved as a result of measures actually implemented during the year.

85. The ALJ rejects OCC's recommendation to apply the results of the comprehensive program evaluation currently being performed retroactively to the 2015 DSM Plan. The results of the 2015 comprehensive program evaluation of the Home Lighting and Recycling Program shall be given prospective effect only, and shall only impact the technical assumptions used for purposes of DSM Plans implemented beginning in January 2016.

4. Avoided Transmission and Distribution Costs

a. Argument

86. Public Service stated in its Direct Testimony that it performed a study of transmission and distribution (T&D) avoided costs as directed by the Commission in its most recent DSM strategic issues proceeding. The Study, conducted by a third-party consultant named The Mendota Group LLC (Mendota Group), is a benchmarking study of utilities around the nation that use a broad range of methodologies and avoided T&D costs that range from \$0 to

\$171/kW-year.²⁰ Because no industry standard exists to calculate avoided T&D costs, Public Service asserts that no methodology exists for the determination of T&D costs in Colorado. Since Public Service assumed the avoided generation plant is a CT, such plant would be located within the Company's footprint and would not require any transmission investment, and thus would not likely result in the avoidance of transmission capacity. Therefore, the avoided transmission cost was set at \$0/kW-year. With respect to distribution costs, Public Service asserts that to date, no known distribution projects have been deferred or avoided by DSM. Public Service notes that controllable loads are not always dispatched at the same time, and there is significant variation in the times that they peak. Further, peak demand on the individual distribution feeder or substation transformer may not be enough to defer or avoid capacity. Therefore, Public Service also set the avoided distribution value to \$0/kW-year.

87. WRA witness Gwendolyn Farnsworth opposed Public Service's use of \$0/kW-year for T&D costs, arguing that the \$66.03 average value of avoided T&D costs determined in the Mendota Study should be applied. In the alternative, WRA recommended that the Commission should use the \$35.39/kW-year proxy value advanced by Public Service in its DSM Strategic Issues application, escalated for inflation. WRA disagrees that the claimed lack of evidence of avoided T&D costs is sufficient to use a value of \$0/kW-year, and makes arguments that it is very likely the value is not \$0. In support, WRA sponsored the answer testimony of Kenneth Wilson that explained, from an engineering perspective, how DSM impacts infrastructure planning and provided examples of how broad-based energy efficiency can result in deferring or eliminating certain equipment. Mr. Wilson identified certain Public

²⁰ The Mendota Group benchmarking study is attached to the Direct Testimony of Shawn White as Attachment SMW-2.

Service projects that he argues provided an opportunity to save costs though avoiding or deferring investment. WRA asserts that Public Service's investigation of avoided T&D costs was insufficient, and a more rigorous study of potential avoided T&D costs should be conducted. WRA notes that DSM is not currently considered in the Company's T&D planning process, and the Commission should require it to do so.

88. Staff filed the Cross-Answer Testimony and Attachments of Paul Caldara, focused specifically on the issue of avoided T&D capacity costs. The premise of his testimony was to explain why Public Service's assumption of avoided T&D costs of \$0/kW-year was not unreasonable, and further recommended against using the results of the Mendota Study. From an engineering perspective, Staff asserts that potential maximum load is only one of the many considerations in constructing an electric distribution system, and energy efficiency effects may not result in sufficient cause to avoid or use certain types of equipment that are otherwise deemed necessary for other valid reasons. With respect to the relationship of avoided costs to DSM, Mr. Caldara explained that higher avoided T&D costs could allow more DSM products to be deemed cost-effective, and also increase the total net economic benefits from a given plan, potentially increasing the Company's performance incentive. Although Staff acknowledges that Public Service complied with the Commission's directive to study avoided T&D costs, a study specific to the Company's system could result in values other than \$0. However, Staff opposes a public planning process as contemplated by WRA.

89. The OCC also filed the Cross-Answer Testimony of Mr. Chris Neil arguing against WRA's proposed avoided capacity costs and asserting a \$0/kW-year T&D value. The OCC asserts that WRA does not acknowledge that the \$35.39/kW-year value in the DSM strategic issues proceeding was associated with the avoided T&D costs of a Combined

Cycle (CC) plant, rather than a CT plant, and are therefore not appropriate to be included in the 2015/2016 DSM Plan. Mr. Neil explains that although Public Service had proposed the use of the \$35.39/kW-year value as a proxy, the Commission did not adopt any value for avoided T&D costs in the DSM strategic issues proceeding. He further cautions that to include a value may result in increased costs to customers in the form of an incentive payment to Public Service, without increasing the amount of DSM. He concludes that a better alternative would be to target one or two specific locations where DSM might be able to defer T&D expenditures.

90. The EEBC stated in its SOP that it supports the use of the proxy \$35.39/kW-year value for avoided T&D costs until Public Service can appropriately defend a study of such costs. EEBC argues that Public Service failed to prove its position of a \$0 value, and that it is likely that there should be some value assigned.

91. SWEEP argues in its SOP that the avoided T&D costs should not be \$0/kW-year given the 2015 to 2020 timeframe contemplated in the 2013 Strategic Issues decision and the anticipated demand reduction of 1,039 MW over the same time period. SWEEP asks that the Commission order Public Service to use the average value from the Mendota Study, \$66.03 per kW-year.

92. In Rebuttal, Public Service refutes WRA's claim that use of a \$0/kW-year T&D avoided cost value would cause Public Service to underinvest in energy efficiency. Further, Public Service asserts that it is the only entity negatively impacted; rather, customers would benefit from the reduced incentive paid to the Company. As explained in the Rebuttal Testimony of Chad Nickell, demand reduction effects occur over a very long period of time and it is therefore unlikely that a value for avoided T&D costs would impact distribution system investment decisions. With regard to transmission planning, Public Service states that DSM is

taken into account in the load forecasting process, and is therefore already accounted for. The use of a \$0/kW-year T&D value is consistent with the planning assumptions that the Company used over the same period for purposes of acquiring additional generation resources through the 2011 ERP.

b. Findings

93. Central to the discussion relating to avoided T&D costs is what the Commission required Public Service to accomplish pursuant to the most recent strategic issues proceeding. The strategic issues proceeding was clear in its requirement that Public Service produce an avoided T&D value in its 2015/2016 DSM Plan Application. In paragraph 97 of Decision No. C14-0731, Proceeding No. 13A-0686EG, Public Service was directed to “study the avoided transmission and distribution capacity costs and propose values in its DSM Biennial Plan for 2015 through 2016.” Public Service commissioned the Mendota Study, and then proposed a \$0/kW-year value for both transmission and distribution.

94. In this proceeding, the intervening parties have advanced three options with respect to the avoided T&D costs: first, a value of \$0/kW-year as proposed by the Company and supported by Staff and the OCC; second, a value of \$66.03/kW-year, the preferred value of WRA and also supported by SWEEP; and third a value of \$35.39/kW-year escalated for inflation, representing the alternative position of WRA, also supported by the EEBC.

(1) Proxy Avoided Cost of \$35.39/kW-Year

95. The ALJ will first address the alternative proposed by WRA, the value of \$35.39/kW-year escalated for inflation.²¹ The ALJ agrees with the OCC that the \$35.39/kW-year

²¹ The ALJ acknowledges the position of WRA that the proposed alternative is \$35.39/kW-year escalated for inflation; however, the rate of inflation contemplated appears absent in the record.

T&D avoided cost value, while used for purposes of informing the 2014 DSM Plan, was not a value given Commission approval in the strategic issues proceeding. It was used by Public Service in that proceeding as a proxy value for avoided costs characterized as “within a reasonable range” of values, although Public Service was also clear that it did not seek “approval of a specific level of avoided distribution costs.”²²

96. Also as demonstrated by the OCC, the \$35.39/kW-year T&D avoided cost value was based on avoided transmission costs related to a CC plant. As quoted by the OCC, Public Service witness James F. Hill stated in testimony filed with Public Service’s 2012/2013 DSM Plan: “[t]herefore, based on the most current information from the 2011 ERP, CTs, not CCs are reflective of the type of generation capacity DSM is likely to avoid over the 2015-2020 timeframe.”²³

97. The 2013 Strategic Issues decision was also clear that the derivation of avoided costs was appropriately based on the RAP CT plant, stating: “Public Service’s derivation of the cost to develop the “Resource Acquisition Period (RAP) CT” is reasonable and representative of the generation capacity costs avoided by DSM when the Company’s system has excess generation capacity.”²⁴

98. Based on the statement by the Commission that the RAP CT is the appropriate proxy plant for avoided transmission costs, the ALJ finds that the \$35.39/kW-year T&D avoided cost value advanced by WRA, escalated for inflation or not, is not appropriate for use as an alternative in this proceeding. To use such a value would base the avoided costs on transmission

²² Response to Surrebuttal Testimony of Jeremy Petersen, Proceeding No. 13A-0686EG, pp. 8-12.

²³ Cross-Answer Testimony and Attachments of Chris Neil, p.4, ll 2-4.

²⁴ Decision No. C14-0731, Proceeding No. 13A-0686EG, p. 33 ¶96.

capacity related to a CC plant, instead of the approved CT plant, and result in a fatally flawed avoided cost value.

(2) Mendota Study Average Value of \$66.03/kW-Year

99. Turning to the Mendota Study that produced the \$66.03/kW-year average value of avoided T&D costs advocated by WRA, the ALJ notes that this result is based on a survey of 32 utilities and state efficiency organizations throughout the United States. A broad range of methodologies was used that produced avoided T&D costs ranging from \$0 to \$171/kW-year. Public Service dismissed the average result of the study, stating “the benchmarking does not result in a methodology for such a determination of the avoided T&D costs in Colorado, if any.”²⁵

100. Throughout the proceeding, little evidence or testimony was offered in support of using the \$66.03 average from the Mendota Study. Even in its SOP, though it did not change its position, WRA’s argument focused against the use of a \$0/kW-year value, rather than supporting the \$66.03 average. WRA advocates for its use more on the grounds that it is within a reasonable range of values, and that no method used to determine avoided T&D costs would be without flaws. SWEEP’s argument that the avoided T&D value should be reflective of the six-year period from 2015 to 2020 ignores the fact that another DSM Plan proposal will be brought forward in 2017, as well as another DSM Strategic Issues filing.

101. The Mendota Study offers a variety of approaches to calculating avoided T&D values, but none of them are Colorado-specific. Simply calculating an average of avoided costs based on approaches used by utilities and organizations entirely unrelated to Public Service,

²⁵ Direct Testimony of Shawn White, p. 29, ll 18-20.

cannot yield a meaningful result. The ALJ does not find sufficient evidence to support the \$66.03/kW-year average value from the Mendota Study, and will deny its use in the calculation of avoided T&D costs in this Proceeding.

(3) Proposed \$0/kW-Year Value

102. The ALJ's primary concern in determining the appropriate value to use for avoided T&D costs surrounds the question of what evidence, if any, exists to establish that Public Service made an affirmative choice to alter its transmission or distribution infrastructure based on DSM. The Company denies any such impact at all. Indeed, Public Service responded to a discovery request propounded by WRA: "The Company does not have any known distribution projects that have been deferred or avoided by DSM."²⁶ This lack of evidence of any DSM impact forms the basis of its recommendation of \$0/kW-year.

103. Public Service, Staff, and the OCC are unanimous in their opinion that the use of a \$0/kW-year value would be reasonable from an engineering standpoint for both transmission and distribution avoided costs. Staff witness Caldara goes to great lengths to describe the considerations of distribution engineers in designing systems adequate to serve the required load. Among his conclusions regarding the distribution system, he states that "there would have to be a very significant and permanent reduction in energy consumption to compel a distribution engineer to downsize a feeder from the larger conductor size to the smaller conductor size."²⁷ With respect to transmission, capacity costs associated with DSM would be avoided only in instances where generation does not exist or where a transmission system is insufficient to serve the new generation. Further, Public Service successfully argued that, because load forecasting is

²⁶ WRA Discovery Request 4-5.

²⁷ Cross-Answer Testimony of Paul Caldara, p.14, ll. 2-4.

already used in the transmission planning process, DSM would not directly affect system reliability requirements.

104. From a distribution standpoint, DSM is most likely to impact service areas that are experiencing load growth, versus investment made to extend service to customers in areas already served. In testimony, all parties appeared to be in agreement that DSM has the *potential* to allow for the deferral or elimination of expenditures over the course of time, as energy efficiency measures are employed in growth areas. However, from a design perspective, in order to eliminate a distribution feeder, Public Service testified that energy efficiency would have to reduce peak demand by about 33 percent, or 5.8 MW.²⁸

105. Of the three distribution substation projects cited by WRA as examples of projects that could have been avoided, Avery, Moon Gulch, and Thornton, it was not shown that the projects would necessarily have been avoided due to DSM measures.

106. Public Service argued both in testimony and at hearing that the impact on demand by DSM is exceedingly small. As pointed out in testimony by Public Service witness Chad Nickell, the effect of cooler weather in the last two years has only resulted in an approximately 5 percent reduction on distribution feeders and transformers as compared to 2012.²⁹ Of Public Service's \$246 million capital budget in 2015, only approximately 9.6 percent is associated with future load growth, greatly reducing the potential deferral of investment by energy efficiency.³⁰

²⁸ Rebuttal Testimony and Attachments of Chad Nickell, p.21 ll 5-8.

²⁹ Rebuttal Testimony and Attachments of Chad Nickell, p.13 ll 8-11.

³⁰ The Distribution Capital Budget for 2015, with forecasted expenditures, was included as Table CSN-1 in Mr. Nickell's Rebuttal Testimony, p.16.

107. Considering Public Service's testimony with respect to the level of demand that energy efficiency would have to avoid to cause a design change, combined with the evidence introduced to the record with respect to the actual amount of load reduction that has been caused by DSM measures, it would be difficult to show that DSM has had any effect on DSM transmission or distribution planning. The positions of the Company, Staff, and the OCC that there likely have been no T&D costs avoided at all, therefore appears to be the most likely scenario. Being shown more likely than not, the ALJ will approve a \$0/kW-year value for the purpose of determining both transmission and distribution avoided costs.

(a) Sufficiency of the Mendota Study

108. Despite commissioning the Mendota Study, Public Service admitted that it relied principally on its own assessment and understanding of the drivers for distribution investment decisions in arriving at its proposed \$0/kW-year T&D cost. The ALJ is left to ask why this appears not to have been given due consideration when the scope of work for the Mendota Study was developed and approved. Public Service's approach in following the directive of the 2013 Strategic Issues decision, given its testimony in this proceeding, appears to have omitted the most critical analysis that would have determined an appropriate value for avoided T&D.

109. WRA's testimony suggested that, through the use of geo-targeted DSM, Public Service could market DSM products that may lead to significant avoided T&D costs. Public Service dismisses this approach, citing the complexity of such an analysis and the potential difficulty in obtaining customer participation. The Company also cites lack of information broken down by particular geographic areas. However, it is this approach that appears most reasonably calculated to reveal what T&D costs may be avoided.

110. For an accurate avoided distribution cost value to be determined, Colorado-specific data should be collected and evaluated using measurable statistics that can only be obtained through a study that is conducted relative to Public Service's service territory.

111. The ALJ believes that Public Service should have been aware that the scope of work of the Mendota Study was not sufficient to yield meaningful results with respect to Public Service's avoided T&D costs. If the Company's intent was to rely on the benchmarking study it commissioned, those results were available for its use and it could have employed a range of analyses based on its own system to present a realistic avoided cost in this proceeding. The ALJ views this as a lost opportunity that was within the Company's control. Therefore, the ALJ will require Public Service to conduct a study, specific to its own service territory, that estimates avoided T&D capacity costs to include projects either on existing or projected transmission or distribution infrastructure that have been, will be, or may be avoided or delayed as a result of DSM or demand reduction programs or products. Such study must be conducted at Public Service's expense without reimbursement by ratepayers.

5. LED Street Light Product

112. Public Service proposes to introduce an LED Street Lighting product offered to both municipal customers who own their own street lights and also to those that receive street lighting service on Company-owned street lights. Public Service expects that the savings from these products will be approximately 13 GWh in 2016. The City and County of Denver has been a pilot city for the LED Street Light product since 2013. Similar to traditional DSM products, Public Service explains that customers will have the ability to opt-in to the rates under existing service schedules. For municipal customers that own their own street lights, Public Service proposes to count net benefits only in the case where a rebate is offered to promote installation of

the product. Relative to Company-owned street lights, Public Service requests to count the savings toward its 400 GWh annual energy efficiency goal, but is not seeking to count such savings in the calculation of its performance incentive. On or before March 31, 2015, the Company plans to file an advice letter introducing the new LED Street Lighting products.

113. OCC witness Dr. Scott England opposes the LED Street Lighting product on the grounds that the value of the product cannot be quantified because the costs of the equipment, which represent almost 100 percent of the costs, have not been disclosed. Further, he argues that by passing on all of the costs and benefits to the product participants, it results in allowing the municipalities to have a self-directed program, which he characterizes as a policy shift. He notes that the costs would not be passed on to municipalities as long as the portion of costs shown for education, marketing, and tracking remain to be collected through the DSMCA.

114. In his Supplemental Answer Testimony, OCC witness Chris Neil takes issue with the Settlement Agreement provision establishing an NTG value of 90 percent for the LED Street Light product. He states there is no factual basis for the value of 90 percent, and because street light conversion is growing rapidly, the NTG value for 2016 should be lower than that established in 2015. He believes that the NTG value should be based on such factors as the proportion of LED street lights being sold, shipped or installed compared to the number of conventional street lights being sold, shipped or installed. Historical data should demonstrate whether the NTG value is appropriate.

115. OCC witness Dr. Scott England also addresses the LED Street Light product in his Supplemental Answer Testimony. Dr. England states that if 100 percent of the benefits and costs of the product are passed on to participating municipalities, there will be a dual claim to the savings derived from the product. In this case, the municipalities should be credited with the

benefits, and not the Company. By the Company counting the benefits passed to the municipalities, two parties will be claiming the same benefits. This impacts ratepayers because the Company is potentially rewarded for these savings through the performance incentive.

116. Public Service states in Rebuttal that although the Street Light product is unique because not all costs will be recovered through the DSMCA, the Company has taken into account the same costs and benefits in calculating cost-effectiveness that it would for any other DSM product. The equipment costs will be recovered through the LED SL tariff rate, similar to other products where participants bear much of the initial investment costs. Administrative costs, like all DSM products, are spread across customers who pay into the DSMCA. Public Service re-emphasizes that it will not include the net economic benefits from the Street Light product in its performance incentive. Public Service refutes the argument that the Street Light product is self-directed, noting that it will still be conducted with the assistance of the utility and customers are not exempted from paying DSM program costs as with self-directed programs. Customers will still pay their share of the DSMCA through the rates paid for street lighting service.

117. Under Paragraph 5.c. of the Settlement Agreement, Public Service agreed to make modest changes to its LED Street Light Product proposal, including eliminating from the electric DSM budget incremental marketing costs expected to be incurred and reducing the NTG ratio assumed from 1.0 to .90. Consistent with the Company's Application, the Settlement Agreement would allow Public Service to include the LED Street Lights product in its DSM Plan for the limited purpose of counting the associated energy savings towards meeting the 400 GWh energy savings goal established by the Commission in Decision No. C14-0731.

118. Public Service argues that including the LED Street Light product within the 2015/2016 DSM Plan is necessary to enable it to close the gap between the savings that can be achieved through traditional DSM programs starting in 2016 and the 400 GWh of electric energy savings goal the Commission established for 2016 and beyond. Public Service introduced evidence showing the reduced opportunities for energy savings going forward from its residential and business lighting products on account of the changes in standards that began in 2012. Public Service asserts that the Commission anticipated the Company's need to introduce non-traditional DSM products such as the LED Street Lights product, when it tempered Public Service's proposal in the 2013 strategic issues proceeding to lower its energy savings goals beginning in 2015 and instead established an energy savings goal of 400 GWh.

119. OCC advances a number of arguments why the LED Street Lights product should be excluded from the DSM Plan. Specifically, the OCC argued that it was not possible to determine the product's cost-effectiveness. The OCC further contended that the product differed in significant respects from other more traditional DSM products. In response, Public Service showed that the LED Street Lights product shares many of the characteristics of other DSM products. Specifically, Public Service explained that, contrary to OCC's assertions, the flow of costs and benefits under the proposed LED Street Lights product is substantially the same as it is for all energy efficiency products. For example, in the case of traditional energy efficiency products, certain costs of installation are paid for by the customer. Likewise, in the case of the LED street lights product, installation costs will be paid for by municipal customers in their rates for service. In the case of traditional energy efficiency products, the customer directly benefits from the energy savings associated with energy efficient measures through reduced bills for electric or gas service and the Company takes credit for such savings toward meeting the energy

savings goal that has been established by the Commission. Here just like a traditional energy efficiency product, the rate for LED street lights that is paid by the municipal customer will reflect the reduction in energy usage relative to what it would be under the standard high pressure sodium street light product. Also, similar to when a customer implements a traditional energy efficiency measure, the Company would take credit for the achieved energy savings toward meeting its 400 GWh goal. Lastly, as is the case for all energy efficiency products, all customers will realize system benefits associated with avoided generation and avoided energy costs that will be realized as a result of the municipal customer's subscription to the new offering.

120. Public Service noted that the factor that distinguishes the LED Street Lights product from more traditional energy efficiency products is that it is not seeking to include the net economic benefits associated with the offering in calculating its performance incentive. Public Service argues that this distinction is not determinative. The inclusion of net economic benefits is simply a component of the incentive mechanism that has been established to incent the Company to engage in energy efficiency activities. Public Service argues that there is no requirement that the Company include a product's net economic benefits in calculating the performance incentive, in order for the product to be included in the Plan and for the Company to take credit for the savings associated with its efforts to have customers shift to the energy efficient alternative.

121. Also in response to OCC, Public Service presented the cost-benefit analysis for the LED Street Lights product showing that when all the same categories of costs and benefits are included in the MTRC calculation, the LED Street Lights product reflects an MTRC that is greater than one.

122. The ALJ finds persuasive Public Service's reasoning for including the LED Street Lights product as part of the DSM Plan. In particular, there are sufficient similarities between the LED Street Lights product and other more traditional energy efficiency products. The ALJ also agrees with Public Service that there is no requirement that the Company recover its marketing costs or other implementation costs through the DSMCA for the product to be included with the DSM Plan nor is it required that the net economic benefits realized as a result of the product's implementation be included in the calculation of the Company's performance incentive. The Company can choose to avail itself of the various incentives provided by the Commission for DSM but need not do so in order to count the energy savings generated from the product towards the Company's energy savings goal.

123. OCC argued that the NTG factor of 90 percent for the LED Street Light product has no basis and should be reduced in the second year. The Settlement Agreement reduced the NTG ratio from 100 percent to 90 percent. At hearing, Public Service witness White testified that the 90 percent NTG ratio was the result of settlement negotiations, and was deemed a reasonable approach to attribute savings from the product to the Company's efforts.³¹ The ALJ agrees with Public Service's logic that the fact that municipalities are converting to LED street lights is not in and of itself an indication that the NTG factor should be reduced; rather, changes in external factors such as lighting codes and standards may actually cause savings to be more difficult to achieve. Public Service pointed out that the service life of the LED Street Lights was determined to be much longer at 15 years than the shorter 5-year timeframe advanced by the OCC, therefore lending less credibility to the need to reduce the NTG ratio due to market

³¹ Transcript Pt. 1, p.48 ll 11-15.

transformation.³² The ALJ finds the reduction of the NTG ratio to 90 percent to be a reasonable compromise for purposes of the 2015/2016 DSM Plan.

124. The OCC makes the argument that savings from the LED Street Light product are double counted for the Company and the municipalities. This argument appears to stem from the response to SWEEP's discovery request suggesting that 100 percent of the costs and benefits of the program will be passed on to municipal customers. Public Service acknowledged that customers are paying for the administration of the program through the DSMCA, and the product differs in that no rebates are offered to end users of Company-owned lights. However, at hearing, Public Service was clear that the energy savings being claimed by the Company in this instance are similar to other savings claimed in terms of bill reductions realized by the customer for other DSM programs. Those savings will not be used for purposes of calculation of the annual performance incentive; only in contribution to the overall savings that are tracked for purposes of meeting its 400 GWh goal. The customer benefit derives from the reduced energy usage from the implementation of the program, which is built into the newly developed tariff rates for this product that are lower than those in the existing tariff. Customers will also benefit from the reduced energy usage resulting from installation of the product.

125. The ALJ finds that the proposed LED Street Light product, as modified by the Settlement Agreement, is in the public interest and will generate significant DSM savings.³³ The product provides a tangible customer benefit in relation to its costs, and will not put undue burden on ratepayers. Further, the product will allow municipal customers that have been paying

³² *Id.*, p. 50, ll 1-7.

³³ The Settlement Agreement reduced incremental marketing costs of \$28,000 in 2015 and \$35,000 in 2016, an additional benefit to customers.

DSM costs in their rates for many years the opportunity to participate in DSM. The LED Street Light product will be approved as modified by the Settlement Agreement.

F. Uncontested Issues

1. DSM Goals

126. As discussed supra, the Settlement Agreement establishes electric and natural gas energy savings goals, as well as demand response goals, for the 2015/2016 DSM Plan.

127. Concerning gas DSM programs, Rule 4753(h)(I) states:

The utility's annual expenditure target for DSM programs shall be, at a minimum, two percent of a natural gas utility's base rate revenues, (exclusive of commodity costs), from its sales customers in the 12-month calendar period prior to setting the targets, or one-half of one percent of total revenues from its sales customers in the 12-month calendar period prior to setting the targets, whichever is greater.

Rule 4753(h)(I), 4 CCR 723-4.

128. In Decision No. C14-0731, the Commission directed Public Service to spend no less than \$12 million on Gas DSM in 2015 and 2016,³⁴ a spending level that is in excess of the minimum required by § 40-3.2-103, C.R.S., and Rule 4753(h)(I).

129. No party contests the natural gas savings targets or budgets proposed by Public Service. The gas budget amounts set forth in the Settlement Agreement are above the statutory minimum spending requirements for gas DSM as well as the higher minimum spending requirement imposed on the Company by the Commission in Decision No. C14-0731.³⁵ The Settlement Agreement complies with the Commission's directive in Decision No. C14-0731 and with Rule 4753(h)(I) as regards the gas DSM budget. Therefore, the ALJ approves the proposed gas budgets and associated gas energy savings targets.

³⁴ Decision No. C14-0731 at ¶ 69.

³⁵ Decision No. C14-0731 at ¶ 76.

130. The ALJ finds that the Settlement Agreement complies with the electric savings goals set forth in Decision No. C14-0731. In addition the Company's commitment to strive to meet the total demand reduction goals established by the Commission is consistent with the Commission's directive in Decision No. C14-0731 that the Company use best efforts to achieve the established goals. Accordingly, the ALJ also finds that the Settlement Agreement complies with the demand reduction goals set forth in Decision No. C14-0731.

2. DSM Budget

131. In Decision No. C14-0731, as modified by Decision No. C14-0997, Decision on Applications for Rehearing, Reargument, and Reconsideration, the Commission established an annual budget cap of \$84.3 million associated with the energy efficiency products included in the 2015 and 2016 portfolios. In the case of natural gas DSM, the Commission established a minimum spending level of \$12 million.

132. Public Service presented detailed budgets for 2015 and 2016 separated by electric and gas DSM and in the case of electric DSM by energy efficiency and demand response. The Settlement Agreement makes only minor changes to Public Service's originally proposed budget.

133. The ALJ finds that the budgets proposed for electric and gas DSM are consistent with the Commission's directives in Decision No. C14-0731 and should therefore be approved as reasonable.

3. Providing All Customer Classes an Opportunity to Participate

134. Regarding electric DSM, § 40-3.2-104(4), C.R.S., states that "[t]he Commission shall ensure that utilities develop and implement DSM programs that give all classes of customers an opportunity to participate." Section 40-3.2-103, C.R.S., pertaining to gas DSM, does not contain similar language concerning an opportunity for all customer classes to

participate, other than the general directive that gas utilities “[d]evelop and begin implementing a set of cost-effective DSM programs for its full service customers” (§ 40-3.2-103(3)(a), C.R.S.).

135. The proposed DSM Plan includes 16 electric products for business customers in 2015 increasing to 17 in 2016. Among the business products proposed is the LED Street Lights product targeted to municipal customers. The residential electric program includes 13 products in both 2015 and 2016. On the gas side, the DSM Plan includes nine residential product offerings in both 2015 and 2016, with seven business products in 2015 increasing to eight in 2016. There are four gas and electric products targeted to low-income residential customers.

136. The Settling Parties observe that the 2015/2016 DSM Plan has been designed to afford all classes of customers an opportunity to participate as required by §§ 40-3.2-103 and 40-3.2-104, C.R.S. The ALJ finds that the record in this proceeding supports this conclusion.

4. Impact Upon Low-Income and Non-Participants.

137. Section 40-3.2-104(4), C.R.S., directs the Commission to “give due consideration to the impact of DSM programs on nonparticipants and on low-income customers.” The Settlement Agreement states:

The Settling Parties agree that the DSM Plan budgets, as proposed by the Company, and as modified by this Stipulation, were and are developed giving due consideration to the impact of the DSM Plan on non-participants and low-income customers, as required by C.R.S. §40-3.2-104(4),

Settlement Agreement p. 15, ¶6

138. The proposed 2015/2016 DSM Plan, as modified by the Settlement Agreement, includes products that meet a variety of customers’ needs and that have been designed to expand the number of participants in DSM. For example, Public Service has proposed to transition its Energy Feedback Pilot to a regular product and expand participation from the current level of

approximately 100,000 residential participants in 2014 to approximately 550,000 customers in 2015 and 2016, representing nearly half of the Company's residential customers.

139. As Public Service testified at hearing, the proposed Plan includes a separate program segment specifically targeted to low-income customers. Public Service has also maintained the level of spending on its low-income programs consistent with 2014 levels.³⁶

140. By Decision No. C08-0560, the Commission stated “(w)e find that the first way to address the impact of DSM on non-participants is to minimize the occurrence of non-participants. By this we mean that all customers need to be provided a reasonable opportunity to participate in DSM. . .”³⁷

141. The ALJ finds that the record supports a conclusion that the 2015/2016 DSM Plan gives due consideration to the impact upon non-participants. As found above, the plan provides a reasonable opportunity for all customers to participate and thereby to benefit directly from DSM. In addition, because the 2015/2016 DSM Plan has been designed in such a way as to remain within the Commission's electric energy efficiency budget cap, the impact on non-participants is further minimized.

142. Similarly, the ALJ finds that the Plan gives due consideration to the impact upon low-income customers by including a separate segment targeted to these customers and by maintaining the budget for the Low-Income Program at the level of the 2014 DSM Plan as directed by the Commission in Decision No. C14-0731.³⁸

³⁶ Tr., Vol. 1, 3/30/15 at p. 56, ll. 9-12.

³⁷ Decision No. C08-0560 at ¶146.

³⁸ Decision No. C14-0731 at ¶ 76.

143. It is found that Public Service has established the cost-effectiveness of the proposed 2015/2016 DSM Plan as a whole by a preponderance of the evidence. Specifically, the Company demonstrated, more probable than not, that both the 2015 and 2016 DSM Plans have an MTRC that is greater than 1 when calculated based on the avoided energy costs as determined by Prosym. Public Service has further shown, more probable than not, that the value of avoided energy will increase, increasing the cost-effectiveness of the 2015/ 2016 DSM Plan, when the Strategist model is used in the manner described by the Company's witness in the 2013 strategic issues proceeding.

G. Settlement Agreement and Application Approval

144. The breadth of expertise represented by the parties herein and the fact that a majority were able to reach a compromise as to the broad spectrum of represented interests (whether to support or not oppose) is strongly indicative that the public interest supports approval of the Settlement Agreement.

145. The ALJ finds that the Settlement Agreement, modified in accordance with the discussion above regarding avoided energy costs, represents a just, equitable, and reasonable resolution of issues that were or could have been contested among the Parties in this proceeding. Approval of the Settlement Agreement, so modified, is just, reasonable, and in the public interest.

146. The Verified Application, as modified by the Settlement Agreement and this Decision, is approved. Public Service's 2015/2016 DSM Plan, as modified by the Settlement Agreement and this Decision, will be approved.

H. Compliance Filing

147. WRA, EOC, EEBC, and Climax/CF&I all argue that Public Service must be required to recalculate avoided energy costs using the Strategist model in the manner described by the Company in testimony filed in Proceeding No. 13A-0686EG as approved by the Commission in Decision No. C14-0731. SWEEP supports WRA's position on avoided energy costs. These parties further contend that the Company should be directed to make a compliance filing specifying the level of avoided energy costs as determined using the Strategist methodology approved in Decision No. C14-0731. Climax/CF&I and WRA suggest that, once Public Service has submitted the compliance filing, the Commission could provide interested parties with an opportunity to comment on such filing.

148. As noted above, OCC seeks to have the record reopened and additional hearings held to consider the reasonableness of the avoided energy costs as determined by the Strategist model, although they oppose approval of the Application prior to such additional presentation.

149. The ALJ finds it necessary for Public Service to supplement calculation of avoided energy costs under the plan using the Strategist model in the manner described by the Company in Proceeding No. 13A-0686EG. Public Service shall make a compliance filing within ten days following issuance of this Decision including the revised avoided energy cost assumptions as well as revised cost benefit calculations by product and for the 2015 and 2016 portfolios as a whole. In the filing, Public Service shall also provide an explanation of how the updated avoided energy cost assumptions were determined, including workpapers supporting all calculations.

150. Any party may object to the impact upon the plan from information included in the compliance filing. Although the Plan is approved by this Recommended Decision, if a party

objects that the compliance filing fails to comply with this Recommended Decision or Decision No. C14-0731 within seven days of the compliance filing, further proceedings will be conducted that may result in modification of the 2015 and 2016 DSM Plans.

151. In absence of objection, Public Service shall use the updated avoided energy costs included in the compliance filing for purposes of determining program and portfolio cost-effectiveness and for calculating electric DSM portfolio net economic benefits achieved under the 2015 and 2016 DSM Plans.

1. Use of a More Current Gas Price Forecast.

152. OCC argues that the Company should be required to update its avoided energy calculations using a more current gas price forecast than the forecast used for purposes of designing and developing the 2015/2016 DSM Plan.

153. In response, Public Service explained that the avoided cost values that the Company includes in its DSM Plans are point-in-time calculations performed at the time the Company designs its DSM Plans using the Company's then current forecast of gas prices, and the resulting avoided cost values do not change for the duration of the plan. This has been the practice since 2009 when Public Service implemented the first approved biennial DSM Plan. Public Service argues that it would be inappropriate to arbitrarily determine that gas prices should be updated if they happen to fall during the pendency of the Company's Application to approve the plan. EOC supports Public Service's position.

154. The ALJ finds that, as advocated by Public Service and EOC, Public Service should use the same 2014-vintage gas price forecast that was used to generate the Prosym-based avoided energy costs, in recalculating avoided energy costs using the Strategist model. This procedure is consistent with the way avoided costs have been determined since 2009.

V. ORDER**A. The Commission Orders That:**

1. The Joint Motion to Approve Stipulation is granted and the Settlement Agreement filed March 2, 2015, is approved, subject to the modifications stated below. A copy of the agreement is attached hereto as Appendix A.

2. The Stipulation and Settlement Agreement is incorporated by reference and made an order of the Commission as if fully set forth herein.

3. The Office of Consumer Counsel's Motion to Reopen the Record or in the Alternative to Dismiss the Application is denied.

4. The Application of Public Service Company of Colorado (Public Service) for Approval of its Electric and Natural Gas DSM Plan for Calendar Years 2015/2016, as amended by the terms of the Stipulation and Settlement Agreement and this Recommended Decision as to avoided energy costs, is approved with modification consistent with the discussion above.

5. Public Service is authorized to use its best efforts to achieve at a minimum, 407.1 GWh in electric energy savings in 2015 and 407.5 GWh in 2016 and a minimum of 79.6 MW in incremental demand reduction for 2015 and 76.2 MW in 2016.

6. Public Service is authorized to use its best efforts to obtain a controllable load of 503 MW in 2015 and 516 MW in 2016 from its Demand Response Program, and strive to meet total demand reduction goals of 593 MW in 2015 and 602 MW in 2016 from the combination of demand response and energy efficiency programs.

7. The gas Demand Side Management (DSM) energy target, as defined in Rule 4753(c), 4 *Code of Colorado Regulations* 723-4, is set at 573,602 Dekatherms for 2015 and

at 619,306 Dekatherms for 2016. Public Service is authorized to use its best efforts to achieve these natural gas savings.

8. Public Service will spend no less than \$12 million annually for its natural gas DSM portfolio.

9. The electric DSM budgets for electric energy efficiency programs of \$81,620,698 in 2015 and \$78,987,015 in 2016 for electric energy efficiency programs and \$13,731,985 in 2015 and \$13,500,426 in 2016 for electric demand response programs, are approved.

10. As more specifically set forth in the Settlement Agreement, Public Service may incur costs of up to an \$84.3 million budget cap without being required to seek Commission approval of a Plan modification. Public Service may modify its electric DSM Plan and budget as necessary to meet the DSM targets, in a manner consistent with the Settlement Agreement and Commission decisions.

11. The avoided cost assumptions set forth in Appendix E of the 2015/2016 DSM Plan, modified in accordance with the discussion above regarding avoided energy costs, are approved for purposes of determining program and portfolio cost effectiveness and for calculating annual portfolio net economic benefits..

12. The technical assumptions, including the deemed savings for prescriptive programs as set forth in the Technical Reference Manual appended to the 2015/2016 DSM Plan as Appendix G are approved in accordance with the Settlement Agreement. These technical assumptions shall be used for developing a forecast of annual Demand Side Management Cost Adjustment expenditures, determining savings achieved (gross savings or deemed savings), determining program and portfolio cost-effectiveness, and for calculating the annual portfolio net economic benefits.

13. The net-to-gross factors used for purposes of developing Public Service's 2015/2016 gas and electric DSM Plans are approved in accordance with the Settlement Agreement.

14. Public Service shall file, on not less than two days' notice, to become effective on the first day of the next calendar month following the effective date of a final Commission Decision in this Proceeding, revised tariff sheets as part of Public Service's Colorado PUC No. 7 – Electric Tariff to provide for the recovery of a *pro rata* portion of the 2015 DSM budgets approved in this proceeding, plus other allowable amounts.

15. Public Service shall file, on not less than two days' notice, to become effective on the first day of the next calendar month following the effective date of a final Commission Decision in this Proceeding, revised tariff sheets as part of Public Service's Colorado PUC No. 6 – Gas Tariff to provide for the recovery of a *pro rata* portion of the 2015 DSM budgets approved in this proceeding, plus other allowable amounts.

16. Public Service shall calculate avoided energy costs under the plan using the Strategist model in the manner described by the Company in Proceeding No. 13A-0686EG.

17. Within ten days following the effective date of this Recommended Decision, Public Service shall make a compliance filing including the revised avoided energy cost assumptions as well as revised cost benefit calculations by product and for the 2015 and 2016 portfolios as a whole. In the filing, Public Service shall also provide an explanation of how the updated avoided energy cost assumptions were determined, including workpapers supporting all calculations.

18. Any party may object to the impact upon the plan from information included in the compliance filing. Although the Plan is approved by this Recommended Decision, if a party

objects that the compliance filing fails to comply with this Recommended Decision or Decision No. C14-0731 within seven days of the compliance filing, further proceedings will be conducted that may result in modification of the 2015 and 2016 DSM Plans.

19. In absence of objection, Public Service shall use the updated avoided energy costs included in the compliance filing for purposes of determining program and portfolio cost-effectiveness and for calculating electric DSM portfolio net economic benefits achieved under the 2015 and 2016 DSM Plans.

20. Within 30 days following issuance of a final decision in this Proceeding, Public Service shall file an updated version of the approved DSM Plan reflecting redlined changes agreed to in the Stipulation and Settlement Agreement as modified by this Recommended Decision, together with an errata correcting any errors.

21. Public Service shall conduct a study, specific to its own service territory, that estimates avoided T&D capacity costs to include projects either on existing or projected transmission or distribution infrastructure that have been, will be, or may be avoided or delayed as a result of DSM or demand reduction programs or products. Such study must be conducted at Public Service's expense without reimbursement by ratepayers.

22. Response time to any exceptions filed shall be shortened to seven days.

23. This Recommended Decision shall be effective on the day it becomes the Decision of the Commission, if that is the case, and is entered as of the date above.

24. As provided by § 40-6-109, C.R.S., copies of this Recommended Decision shall be served upon the parties, who may file exceptions to it.

a) If no exceptions are filed within 20 days after service or within any extended period of time authorized, or unless the Decision is stayed by the Commission upon its own

motion, the Recommended Decision shall become the Decision of the Commission and subject to the provisions of § 40-6-114, C.R.S.

b) If a party seeks to amend, modify, annul, or reverse basic findings of fact in its exceptions, that party must request and pay for a transcript to be filed, or the parties may stipulate to portions of the transcript according to the procedures stated in § 40-6-113, C.R.S. If no transcript or stipulation is filed, the Commission is bound by the facts set out by the administrative law judge and the parties cannot challenge these facts. This will limit what the Commission can review if exceptions are filed.

25. If exceptions to this Decision are filed, they shall not exceed 30 pages in length, unless the Commission for good cause shown permits this limit to be exceeded.

(S E A L)



THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

G. HARRIS ADAMS

Administrative Law Judge

ATTEST: A TRUE COPY

A handwritten signature in cursive script that reads 'Doug Dean'.

Doug Dean,
Director